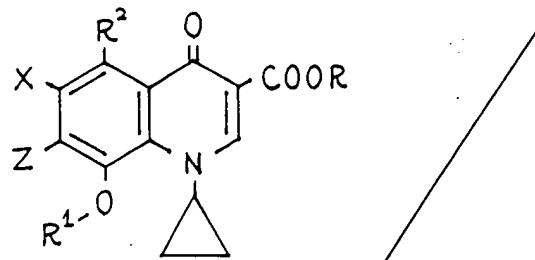


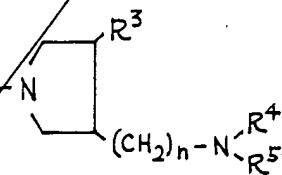
W.P.
ACI
What is claimed is :

1. 8-Alkoxyquinolonecarboxylic acid derivatives represented by a general formula (I);



(I)

wherein R indicates a hydrogen atom or lower alkyl group, R¹ indicates a lower alkyl group, R² indicates a hydrogen atom, amino group or nitro group, X indicates a halogen atom, and Z indicates a halogen atom, piperazino group, N-methylpiperazino group, 3-methylpiperazino group, 3-hydroxypyrrolidino group, or pyrrolidino group of the following formula,

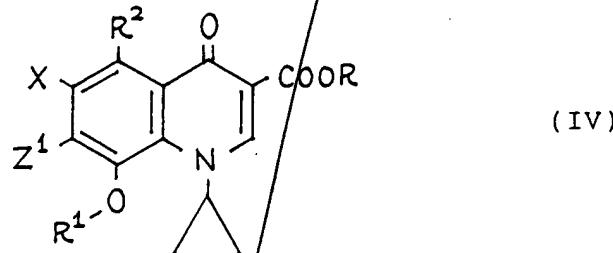


(here, n is 0 or 1, R³ indicates a hydrogen atom or lower alkyl group, R⁴ indicates a hydrogen atom, lower alkyl group or substituted lower alkyl group and R⁵ indicates a hydrogen atom, lower alkyl group, acyl group or alkoxy carbonyl group.), the hydrates or the pharmaceutically acceptable acid addition or alkali salts thereof.

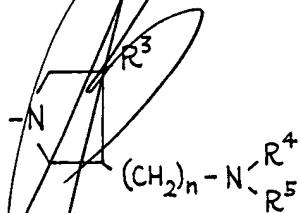
2. An antibacterial agent having at least not less than one kind of the compounds according to claim 1 as effective ingredients.
3. A process for preparing 8-alkoxyquinolonecarboxylic acid

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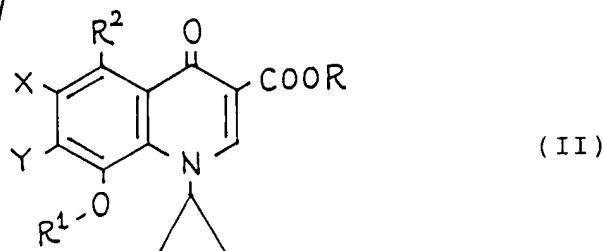
derivatives represented by a general formula (IV);



wherein R indicates a hydrogen atom or lower alkyl group, R^1 indicates a lower alkyl group, R^2 indicates a hydrogen atom, amino group or nitro group, X indicates a halogen atom, and Z^1 indicates a piperazino group, N -methylpiperazino group, 3-methylpiperazino group, 3-hydroxypyrrolidino group, or pyrrolidino group of the following formula,



(here, n is 0 or 1, R^3 indicates a hydrogen atom or lower alkyl group, R^4 indicates a hydrogen atom, lower alkyl group or substituted lower alkyl group and R^5 indicates a hydrogen atom, lower alkyl group, acyl group, alkoxy carbonyl group.), the hydrates or the pharmaceutically acceptable acid addition or alkali salts thereof characterized in that compounds represented by a general formula (II);

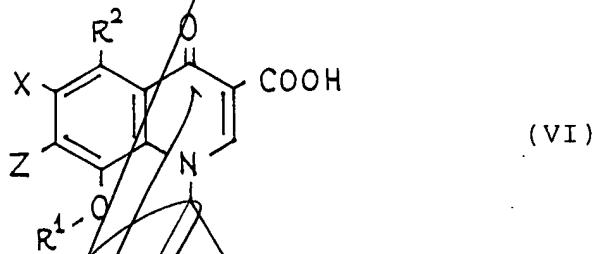


wherein R, R¹, R² and X are same as above, and Y indicates a same or different halogen atom from X, are allowed to condense with amines represented by a general formula (III)

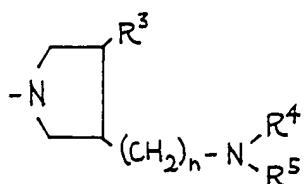


wherein Z¹ is same as above.

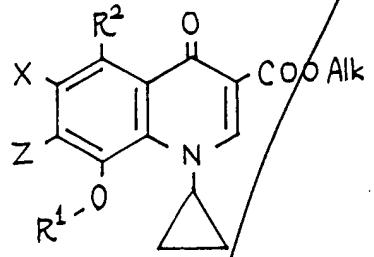
4. The process of preparing 8-alkoxyquinolonecarboxylic acid derivatives represented by a general formula (VI);



wherein R¹ indicates a lower alkyl group, R² indicates a hydrogen atom, amino group or nitro group, X indicates a halogen atom, and Z indicates a halogen atom, piperazino group, N-methylpiperazino group, 3-methylpiperazino group, 3-hydroxypyrrolidino group, or pyrrolidino group of the following formula,



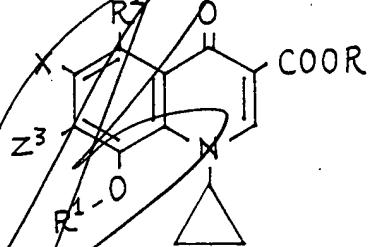
(here, n is 0 or 1, R³ indicates a hydrogen atom or lower alkyl group, R⁴ indicates a hydrogen atom, lower alkyl group or substituted lower alkyl group and R⁵ indicates a hydrogen atom, lower alkyl group, acyl group, alkoxy carbonyl group.), the hydrates or the pharmaceutically acceptable acid addition or alkali salts thereof, characterized in that compounds represented by a general formula (V),



(V)

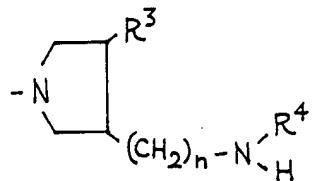
wherein Alk indicates a lower alkyl group, and R¹, R², X and Z are same as above, are hydrolyzed.

5. The process of the preparing 8-alkoxyquinolonecarboxylic acid derivatives represented by a general formula (VIII);

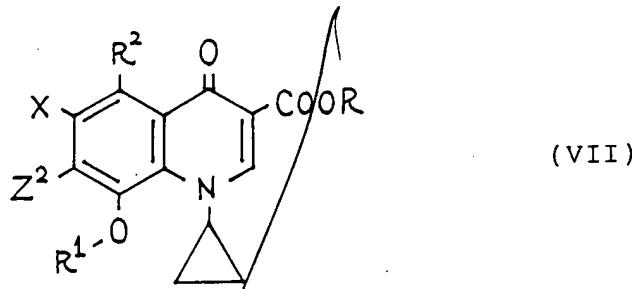


(VIII)

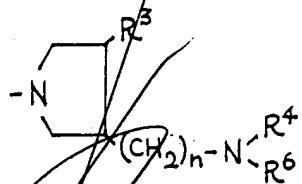
wherein R indicates a hydrogen atom or lower alkyl group, R¹ indicates a lower alkyl group, R² indicates a hydrogen atom, amino group or nitro group, X indicates a halogen atom, and Z³ indicates a pyrrolidino group of the following formula,



(here, n is 0 or 1, R³ indicates a hydrogen atom or lower alkyl group, R⁴ indicates a hydrogen atom, lower alkyl group or substituted lower alkyl group.), the hydrates or the pharmaceutically acceptable acid addition or alkali salts thereof, characterized in that compounds represented by a general formula (VII);

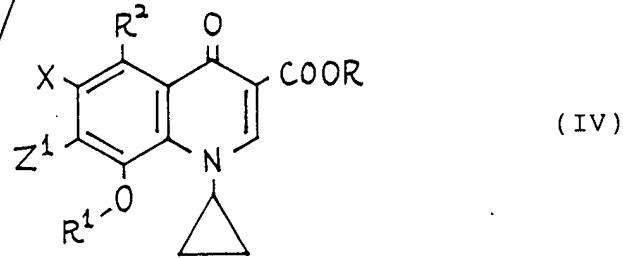


wherein R, R¹, R² and X are same as above, and Z² indicates a pyrrolidino group of the following formula,

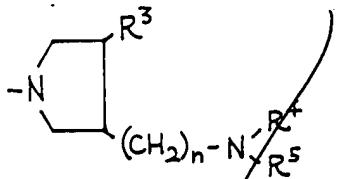


(here, n, R³ and R⁴ are same as above, and R⁶ indicates an acyl group or alkoxy carbonyl group.), are submitted to deacylation.

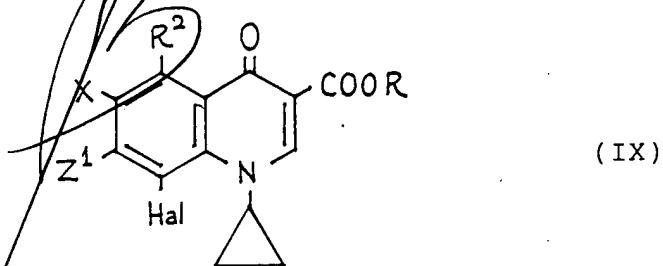
6. The process of preparing 8-alkoxyquinolonecarboxylic acid derivatives represented by the general formula (IV);



wherein R indicates a hydrogen atom or lower alkyl group, R¹ indicates a lower alkyl group, R² indicates a hydrogen atom, amino group or nitro group, X indicates a halogen atom, and Z¹ indicates piperazino group, N-methylpiperazino group, 3-methylpiperazino group, 3-hydroxypyrrolidino group, or pyrrolidino group of the following formula,



(here, n is 0 or 1, R³ indicates a hydrogen atom or lower alkyl group, R⁴ indicates a hydrogen atom, lower alkyl group or substituted lower alkyl group and R⁵ indicates a hydrogen atom, lower alkyl group, acyl group or alkoxy carbonyl group.), the hydrates or the pharmaceutically acceptable acid addition or alkali salts thereof, characterized in that compounds represented by a general formula (IX)



wherein R, R², X and Z¹ are same as above, and Hal indicates a same or different halogen atom from X, are allowed to condense with alcohols represented by a general formula (X),



wherein R¹ indicates a lower alkyl group, in the presence of basic catalyst.

7. The process of preparing according to claim 6, wherein the basic catalyst is alkali metal alcoholate.